

BELOV, A.; SKAKUNOV, I.; SAVITSKIY, V., trener; GRAMAKOVSKIY, G.; DUDKOVA, O.;
MINAYEV, A.; PEN'KOV, I.; SEREBNYAKOV, Ye., master sporta

Increase the number of sportsmen and improve their skill. Za rul. 20
no.7:3 JI '62. (MIRA 15:7)

1. Nachal'nik Vitebskogo avtomotokluba, predsedatel' oblastnoy
kollegii sudey (for Belov). 2. Predsedatel' soveta Vitebskogo
avtomotokluba (for Skakunov). 3. Chlen soveta Vitebskogo avtomotokluba
(for Savitskiy, Gramakovskiy, Dudkova)
(Vitebsk—Motor vehicles—Societies, etc.)

PENKOV, I.; BELCHEVA, I.

Supplying the Madan mining basin with vegetables, fruits, and milk. Izv Geog inst BAN 7:183-199 '63.

PENKOV, Ignat; DAKOV, Vasil

Canning and preserving industry in the administrative and
economic district of Plovdiv. GGD Brak 1961 56 no.3:93-124
'61-'62 [publ. '63].

PENKOV, Ignat.; DAKOV, Vasil

Canning and preserving industries in the Pleven and
Pazardzhik administrative and economic districts. Godishnik
biol 57 no.2:157-199 '62-'63 [publ. '64].

YELYUTIN, V.P.; MURAKH, M.A.; PEN'KOV, I.A.

Viscosity of liquid zirconium. Izv. vys. ucheb. zav.; Chern. met. 8
no.7:128-132 '65. (MIRA 18:7)

1. Moskovskiy institut stali i splavov.

KUCHEROV, P.S., otv.red.; STARIKOV, N.A., akademik, red.; PEN'KOV, A.M., red.; KUKHTENKO, A.I., doktor tekhn.nauk, red.; KOVSHULYA, A.A., kand.tekhn.nauk, red.; GARMASH, N.Z., kand.tekhn.nauk, red.; KISINA, I.V., red.izd-va; YURCHISHIN, V.I., tekhn.red.

[Tapping and working mineral deposits] Voprosy vskrytiia i razrabotki mestorozhdenii poleznykh iskopaemykh. Kiev, 1958. 172 p. (MIRA 12:6)

1. Akademiya nauk USSR, Kiyev. Institut gornogo dela. 2. Chlen-korrespondent AN USSR (for Kucherov, Pen'kov). 3. AN USSR (for Starikov).

(Mining engineering)

PEN'KOV, A.M.; STAROVEROVA, V.A.

Comparative studies of the mechanical properties of coals from
some seams which are subject to sudden outbursts and from some
which are not. Sbor.trud.Inst.gor.dela AN URSR no.5:3-30 '58.
(MIRA 15:5)

(Donets Basin--Coal--Testing)

PEN'KOV, I.N.

Reaction formations in ores of the Chinasyr-Say deposit. Izv.
vys.ucheb.zav.; geol.i razv. 1 no.9:72-77 S '58.
(MIRA 12:9)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-
Lenina, Kafedra poleznykh iskopayemykh.
(Chinasyr-Say region (Kazakhstan)--Ore deposits)

PEN'KOV, I.N.

Gold in hypogene ores of the Chinasy1-Say complex metal deposit.

Izv.vys.ucheb.zav.; geol. i razv. 1 no.5:105-111 M₂ '58.

(MIRA 12:2)

1. Kazanskiy gosudarstvennyy universitet, kafedra poleznykh isko-
payemykh i razvedochnogo dela.

(Kazakhstan--Gold ores)

PEN'KOV, I.N.

Paragenetic relation between minerals in hypogene ores of the
Chinasyl-Say deposit. Geol.rud.mestorozh. no.1:99-102 Ja-V
'59. (MIRA 12:5)

1. Kazanskiy universitet im. V.I.Ul'yanova-Lenina.
(Kazakhstan--Mineralogy)

PEN'KOV, I.N.

Metamorphism of galenite in lead-zinc ores of the Srednyy deposit
(Rudnyy Altai). Zap. Vses. min. ob-va 89 no.1:107-111 '60.
(MIRA 13:10)

1. Kazanskiy gosudarstvennyy universitet imeni V.I. Ul'yanova-
Lenina, kafedra poleznykh iskopayemykh.
(Altai Mountains--Galena)

ELLERN, S.S.; PEN'KOV, I.N.; SITDIKOV, B.S.; VALEYEV, R.N.; MATYAYEVA, K.I.

Association of hydrothermal carbonate, bitumen, and sulfides
in the Devonian of the northern part of the Kazan-Kirovo
trough. Dokl.AN SSSR 145 no.5:1123-1126 '62. (MIRA 15:8)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.
Predstavleno akademikom N.M.Strakhovym.
(Kirov Province--Petrology)

S/020/62/147/002/019/021
B101/B186

AUTHORS: Safin, I. A., Pen'kov, I. N.

TITLE: Nuclear quadrupole resonance in stibnite

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 2, 1962, 410-413

TEXT: The nuclear quadrupole resonance (n.q.r.) spectra of natural stibnite single crystals of Sb^{121} and Sb^{123} nuclei situated in chemically nonequivalent positions A and B (Fig. 1) were recorded (Table 1) by the pulse method (I. A. Safin, Pribery i tekhn. eksp., no. 3, 98 (1962)). Results: (1) A maximum of four lines was observed for the A nuclei of Sb, i.e., there are only two systems of the principal tensor axis of the electric field gradient for position A. If the magnetic field lies in the ac plane and is parallel to the c axis the n.q.r. line is not split. Splitting in two components occurs with other H_0 directions. The z axes of the two systems of the principal tensor axes of the electric field gradient form an angle of 90° with the c axis, and $56 \pm 1^\circ$ with the a axis. (2) For B nuclei: If the magnetic field lies in the ac plane, no splitting occurs with any direction of H_0 , i.e., the z axis coincides for B nuclei with the b axis of crystals. (3) The width T_2^* of the resonance line of Card 1/4

Nuclear quadrupole resonance in...

S/020/62/147/002/019/021
B101/B186

Gaussian form is weakly temperature-dependent whereas T_2' (the nonsecular part of the width determining the form of the signal envelope) varies with temperature. Diffusion of defects in the Sb_2S_3 lattice at room temperature is assumed to be the cause of this. The deviating form of the envelope for the $+1/2 \leftrightarrow +3/2$ transitions is assumed to be caused by beats owing to the multiplet structure of the n.q.r. lines. The splitting of the n.q.r. lines is due to indirect interaction of the nuclear spins of Sb^{121} and Sb^{123} and to the effect of the terrestrial magnetic field. (4) The spin-lattice relaxation time T_1 at 77°K is $4.3 \cdot 10^{-3}$ sec ($\pm 10\%$) for the $+1/2 \leftrightarrow +3/2$ transitions of the A nuclei, and $11.8 \cdot 10^{-3}$ sec ($\pm 10\%$) for the B nuclei. (5) The eQq constants (quadrupole coupling constants) suggest sp hybridization of the A complexes, whereas the B complexes form Sb_4S_6 dimers. The double bonds of these dimers render the rotation of complexes difficult. This explains the differences in T_1 and the temperature gradients dv/dT for A and B nuclei. No n.q.r. effects were observed for artificial Sb_2S_3 samples, probably because their lattice is little ordered. There are

Card 2/4

Nuclear quadrupole resonance in...

3/020/62/147/002/019/021
B101/B186

2 figures and 1 table. The most important English-language reference is:
T. Wung, Phys. Rev., 99, 566 (1955).

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala Akademii
nauk SSSR (Physicotechnical Institute of the Kazan' Branch of
the Academy of Sciences USSR)

PRESENTED: June 29, 1962, by B. A. Arbuzov, Academician

SUBMITTED: June 22, 1962

Fig. 1. Unit cell of stibnite projected onto the ab plane of the crystal
(above); relative orientation of the crystal axes and of the principal axis
of the electric field gradient for positions A and B of Sb^{121} and Sb^{123}
nuclei. Distances in Å.

Table 1. Legend: (1) Position of nuclei in the lattice; (2) transition;
(3) resonant frequency, Mc/sec; (4) T_2 , $\mu\text{sec} \pm 10\%$; (5) $\Delta\nu$, kc/sec $\pm 10\%$;
(6) eQq , Mc/sec, 77°K; (7) $d\nu/dT$, kc/deg.

Card 3/4

SOTIROV, Angel; PENKOV, Ilia

Comparative studies of some domestic and foreign mulberry varieties.
Selskостop nauka 2 no.10:1258-1264 '63.

PEN'KOV, I.N.; SAFIN, I.A.

Nuclear quadrupole resonance in realgar. Dokl. AN SSSR 153
no.3:692-693 N '63. (MIRA 17:1)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-
Lenina i Fiziko-tekhnicheskoy institut Kazanskogo filiala
AN SSSR. Predstavleno akademikom N.V. Belovym.

BR

ACCESSION NR: AP4043373

S/0181/64/006/008/2467/2470

AUTHORS: Pen'kov, I. N.; Safin, I. A.

TITLE: Nuclear quadrupole resonance in proustite and pyrargyrite

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2467-2470

TOPIC TAGS: spin lattice relaxation, silver compound, nuclear quadrupole resonance, crystal lattice defect, diffusion mobility, frequency shift, isomorphism

ABSTRACT: Nuclear quadrupole resonance (NQR) was used to investigate some fine features of the chemical nature and structure of proustite (Ag_3AsS_3) and pyrargyrite (Ag_3SbS_3), which have similar structures. The NQR spectra were obtained by a pulsed procedure, using equipment described previously (I. A. Safin, PTE No. 3, 98, 1962). The tests were made on polycrystalline mineral samples from

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ACCESSION NR: AP4043373

Saxony (East Germany). Measurement of the spin-lattice time has shown that the dominating mechanism of spin-lattice relaxation is diffusion of defects in the crystal lattice of the proustite or pyrargyrite. The behavior of the envelope of the quadrupole echo of signals with variation of the interval between two sounding pulses indicates that the magnetic environment (the silver nuclei) causes splitting of the resonance line, which is normally masked by the broadening of the NQR line. Experiment has also shown that an NQR signal can be observed, due to the impurity arsenic nuclei in pyrargyrite, at a frequency (67.575 Mc) somewhat higher than the corresponding resonant frequency of the same nuclei in proustite. This frequency shift demonstrates the isomorphic substitution of the antimony in the lattice of pyrargyrite by the As atoms. "The authors thank B. M. Kozyrev and V. A. Polyanin for interest in the work and V. I. Valakhanovich for carrying out the spectral analysis of the samples." Orig. art. has: 3 figures and 1 table.

Card 2/5

ACCESSION NR: AP4043373

ASSOCIATION: Kazanskiy fiziko-tekhicheskiy institut AN SSSR
(Kazan' Physicotechnical Institute, AN SSSR)

SUBMITTED: 20Mar64

ENCL: 02

SUB CODE: SS

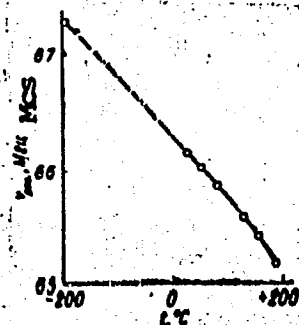
NR REF SOV: 004

OTHER: 002

Card 3/5

ACCESSION NR: AP4043373

ENCLOSURE: 01

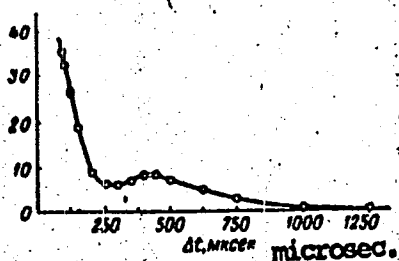


Temperature dependence of NQR frequency for
As⁷⁵ nuclei in proustite

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ACCESSION NR: AP4043373

ENCLOSURE: 02



Envelope of quadrupole echo signals as a function of the interval between two sounding pulses

Card 5/5

ACCESSION NR: AP4035818

8/0020/64/156/001/0139/0141

AUTHOR: Pen'kov, I. N.; Safin, I. A.

TITLE: Nuclear quadrupole resonance in orpiment

SOURCE: AN SSSR. Doklady*, v. 156, no. 1, 1964, 139-141

TOPIC TAGS: orpiment, nuclear quadrupole resonance, structure determination

ABSTRACT: This is a continuation of the work of I. A. Satin (Zhurn. struktural'noy khimii, 4, 1963, p. 267) on nuclear quadrupole resonance (NQR) of As^{75} in orpiment. This work has some additional results on the study of NQR in this compound and their interpretation. The NQR spectrum of As^{75} nuclei was investigated at 77 and 300 K. For all orpiment specimens the NQR spectrum consists of two lines of equal intensity. It follows that a unit cell of orpiment consists of two types of AsS_3 coordination complexes which do not coincide under any symmetry operations. Since the resonance frequencies differ very little one may expect that the crystallographic nonequivalence results from slight distortions of the symmetry of complexes. These distortions result from the effects of interplanar forces. This is in agreement with structural data in that one of the As-S distances within the cell

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ACCESSION NR: AP4035818

is shorter than the sum of Van der Waal's radii for As and S. It is sufficient to compress the unit cell in the direction of the b' axis in order to produce the obtained NQR for the changed electron atmosphere of the resonating nuclei. It was noted that in orpiment after melting and multiple firing there were no traces of NQR even though in the natural specimens the signals of quadrupole echo were observed on the screen of an oscillograph with signal to noise ratio of the order of 100. "The authors express their gratitude to L. M. Miropol'skiy and B. M. Kozyrev for their attention to this work." Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina
(Kazan State University) Fiziko-technicheskiy institut
Kazanskogo filiala Akademii nauk SSSR (Institute of Physics and Technology of the
Kazan' Branch of the Academy of Sciences SSSR).

SUBMITTED: 28Dec63

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 003

Card

2/2

L 25083-65 EWT(1)/EEC(t) Feb IJP(c)

ACCESSION NR: APS603434

S/0161/RS/CGI/051/024702-2

AUTHOR: Pen'kov, I. N.; Safin, I. A.

TABLE: Effect of supercritical CO₂ on the degradation of PCE in water

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 190-193

TOPIC TAGS: nuclear quadrupole resonance, bismuth trioxide, impurity effect

ABSTRACT: The effect of impurities on the nuclear quadrupole resonance (NQR) spectra of different modifications of Bi_2O_3 was investigated with pulsed apparatus described by one of the authors elsewhere (Barin, Pib. no. 1, 2, 1964, Solid et al, Zav. lab. v. 30, 6/6, 1964). The α modification (bismite) and β modification (B, Be, and Ti, while the γ modification (sillenite) was obtained by mixing definite amounts of SiO_2 and Al_2O_3 with the α modification. The preparation of the samples is briefly described. The NQR spectra of the α and β modifications are equivalent bismuth atom positions per unit cell. The γ modification is characterized in the vicinity of only one of the two bismuth atom positions. In the α modification, the impurity aluminum cations enter into the bismuth atom positions.

Card 1/2

L 25083-63

ACCESSION NR: AP5003434

is first "crumbled" by the silicon impurity atoms. The test results are briefly interpreted. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR, Kazan' (Physicotechnical Institute AN SSSR)

SUBMITTED: 09Jul64

ENCL: 00

SUB CODE: SS, NP

NR REF SOV: 005

OTHER: 002

Card 2/2

PEN'KOV, I.N.; SAFIN, I.A.

Nuclear quadrupole resonance in bournonite. Dokl. AN SSSR 161 no.6:
1404-1406 Ap '65. (MIRA 18:5)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina
i Kazanskiy fiziko-tehnicheskii institut AN SSSR. Submitted
November 12, 1964.

GELLERT, Jozsef; PENKOV, Ivan; KAMARAS, Laszlo; JOZSA, Gabor

Effect of the blood serum of cancer patients on the Paramecium
caudatum EHRB. Annales Biol Tihany 28:3-10 '61.

1. Biologiai Kutatóintézet, Tihany; Megyei Kórház Sebészeti Osztály,
Veszprem. 2. "Annales Instituti Biologici (Tihany) Hungaricae
Academiae Scientiarum" szerkesztő bizottsági tagja (for Gellert).

PENKOV, Ivan, dr.; ABRANDI, Endre, dr.

Experiences with artificial hibernation in surgical patients,
especially in peritonitis. Orv. hetil. 98 no.12:295-298 24 Mar
57.

1. A Veszprem Megyei Korhaz (igazgato: Galacz, Lajos, dr.)
Sebészeti Osztalyanak (foorvos: Penkov, Ivan, dr.) es a
Szegedi Orvostudomanyi Egyetem Muttetani Intezetének
(igazgato: Petri, Gabor, dr. egyet. tanar) kozlemenye.
(HIBERNATION, ARTIFICIAL
in surg. of peritonitis & other. dis. (Hun))
(PERITONITIS, surg.
artif. hibernation in (Hun))
(SURGERY, OPERATIVE
same)

PENKOV, I. M.

PENKOV, I. M.--"Analysis of the Operation of Locomotive-Repair Installations in Bulgaria and Measures to Improve the Use of Their Operating Capacities on the Basis of the Progressive Experience of Locomotive-Repair Installations in the USSR." Min Railroads USSR. Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers imeni I. V. Stalin. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science)

SO Knizhanay letopis'
No 2, 1956

PEN'KOV, K.

Against fictitious piece work. Sots.trud no.8:84 Ag '56. (MLRA 9:10)

1. Starshiy normirovshchik Noril'skoy Teplovoy elektricheskoy tsentral'-
noy stantsii.

(Electric power plants) (Bonus system)

PENKOV, K.

What surveys of experimental laboratories and workshops reveal.
p. 6. RATSIONALIZATSIYA. (Institut za ratsionalizatsiia)
Sofiya. Vol. 6, no. 1, Jan. 1956.

SOURCE: EEAL - LC Vol. 5 No. 11 Nov. 1956

PENKOV, L.

"Karl Marxstandt", P. 14, (GEOGRAFIIA, Vol. 4, No. 2, 1954, Sofiya, Bulgaria)

SO: Monthly List of Eastern European Accessions, (EAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

MUROMTSEV, G.S.; PEN'KOV, L.A.; BLOKHINA, V.V., red.; DEYEVA, V.M.,
tekhn. red.

[Gibberellins]Gibberelliny. Moskva, Sel'khozizdat, 1962.
230 p. (MIRA 15:11)

(Gibberellin)

PEN'KOV, L. A.
L 53997-65

ACCESSION NR: AP5017373

UR/0020/65/160/004/0960/0963

AUTHOR: Kugatova-Shemyakina, G. P.; Ushakova, V. F.; Rudenko, V. A.; Smirnova, G. P.;
Grechuhnikov, A. I.; Mishurovakaya, L. M.; Agakishiyev, D. A.; Pen'kov, L. A.

TITLE: New growth stimulators

SOURCE: AN SSSR. Doklady, v. 160, no. 4, 1965, 960-963

TOPIC TAGS: plant development

Abstract: Compounds from the following groups were synthesized by the authors and found to be highly active as plant growth stimulators: delta-3-cyclohexenyl- and cyclohexylbutanolones, delta-3-cyclohexenylbutenones, cyclohexylbutanes, and cyclohexylbutenones. The authors were particularly interested in determining the relationship between the structure and degree of activity of the compounds. Laboratory and field tests on the potato showed: (1) compounds of the cyclohexene series were more active than the corresponding compounds of the cyclohexane series; (2) the introduction of a methyl group into the ring, especially in position 2 or 6, significantly increased the activity of the compound; (3) the substitution of a phenyl for a methyl group increases the activity even more; (4) the introduction of a second methyl

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L 53997-65

ACCESSION NR: AP5017373

group into the ring not only does not increase the activity of the compound, it may even decrease it; (5) growth stimulation also depends on the spatial structure of the molecule. Orig. art. has 6 tables.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry, Academy of Sciences, SSSR); Institut kartofel'nogo khozyaystva, Akademii nauk TurkmSSR (Institute of Potatoe Growing, Academy of Sciences TurkmSSR); Institut botaniki, Akademii nauk TurkmSSR (Institute of Botany, Academy of Sciences TurkmSSR); Institut ovoshchnogo khozyaystva, Akademii nauk TurkmSSR (Institute of Vegetable Growing, Academy of Sciences, TurkmSSR).

SUBMITTED: 02Jun64

ENCL: 00

SUB CODE: LS, 00

NR REF SOV: 004

OTHER: 001

JPRS

See
Card 2/2

PENKOV, M.

Advantages of the electric-induction fireboxes for heating the bands of locomotives and railroad cars. p.33.

(TRANSPORTNO DELO, Vol. 9, no. 4, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) 1C, Vol. 6, no. 12, December 1957 Und.

PEN'KOV, M. A., klin. ord.; RSKIN, V. Ya., klin. ord.

Attachment for a large non-reflex ophthalmoscope for calibrometry of the retinal vessels. Vest.oft. 34 no.1:34-37 Ja-P '55 (MLRA 8:4)

1. Iz kafedry glaznykh bolezney (zv.zasl. deyatel' nauki prof. O. A. Dudinov) Kirgizskogo meditsinskogo instituta.

(OPHTHALMOSCOPY, apparatus and instruments, additional device to ophthalmoscope for retinal vessels measurement)

(RETINA, blood supply, vessel caliber measurement, additional device to ophthalmoscope)

PEN'KOV, M. A.

PEN'KOV, M. A. -- "On Changes in the Organ of Vision and Some Problems in the Hemodynamics of Hypertonic Disease." Kirgiz State Medical Inst. Frunze, 1955. (Dissertation for the Degree of Candidate in Medical Sciences).

So.: Knizhnaya Letopis', No. 2, 1956.

PEN'KOV, M.A.
PEN'KOV, M.A. (Frunze)

Clinical significance of sphygmocopy in hypertension. Klin.med.
35 no.9:114-119 S '57. (MIRA 10:11)

1. Iz kafedry glaznykh bolezney (zav. - prof. O.A.Dudinov) Kirgizskogo
meditsinskogo instituta.

(HYPERTENSION, diag.

sphygmocopy of retina & shoulder)

(PULSE

retinal & of shoulder in diag. of hypertension)

(RETINA

pulse & pulse of shoulder in diag. of hypertension)

(SHOULDER

pulse & pulse of retina in diag. of hypertension)

PEN'KOV, M.A., kand.med.nauk

Use of sulfetron in treating eye diseases. Vest.oft. no.3:26-
29 '61. (MIRA 14:9)

1. Kafedra glaznykh bolezney (zav. - prof. N.M. Pavlov) Stavro-
pol'skogo meditsinskogo instituta.
(OPHTHALMOLOGY) (SULPHNETRONE)

PENKOV, M.D.

Growing self-rooted grapes in northern Bulgaria. Agrobiologiya
no.5:122-124 S-O '58. (MIRA 11:11)

1. Institut vinogradstva i vinodeliya, g. Plevna, Bolgariya.
(Bulgaria--Viticulture)

PENKOV, M.D.

Effect of the length of graft stock on the development of the
root system of grape vines after planting into permanent location.
Dokl. Akad. sel'khoz. 23 no. 6:19-26 '58. (MIRA 11:7)

1. Nauchno-issledovatel'skiy institut vinogradarstva i vinodeliya,
gor. Pleven, Bolgariya. Predstavleno akademikom I.P.Gerasimovym.
(Grapes)
(Roots(Botany))

COUNTRY : BULGARIA
 CATEGORY : Cultivated Plants. Fruit. Berry. Nuciferous. M
 Tea.
 ABS. JOUR. : RZhBiol., No. 3, 1959, No. 11138
 AUTHOR : Stoyev, K. D., Penkov, M. D.
 INST. : Plevna Scientific Research Institute of Viticulture*)
 TITLE : The Influence of the Stock Length on the Development of
 the Root System of the Grape Vines After Setting Them
 on the Permanent Site.
 ORIG. PUB. : Lozarstvo and vinarstvo, 1957, 6, No. 5, 12-14.
 ABSTRACT : It was found at the Scientific Research Institute of
 Viticulture and Wine Making in the city of Plevna that
 the main mass of the grapevine roots in Northern Bulgaria
 is located in the case of old plantations in the horizon
 of down to 15 cm, and in the case of young plantations -
 down to 15-30 cm. For the purpose of deepening the dis-
 tribution of the root system, it is recommended to deepen
 the setting of the stock to 40-50 cm which leads to an
 increase in the number of heel roots and also to the in-
 CARD: 1/3 *) and Wine Making.

-147-

COUNTRY :
 CATEGORY :
 ABS. JOUR. : RZhBiol., No. 1959, No. 11138
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :
 ABSTRACT : crease in the yield by 10-20%. The root system of such
 plantings is concentrated in the heel node and to some
 extent in the first node above the heel. When grafting
 the Gymna variety on stocks of 24, 32, 40, 50 and 58 cm
 in length, the total amount of roots was largest in the
 longest stocks. The shortening of the stock to the stan-
 dard length (32 cm) led to the decrease in the number of
 heel roots by 22-42%. In long stocks, the roots of the
 internodes are concentrated chiefly in the 1st, 2d, 3d
 and partly in the 4th nodes counting them from the top

PENKOV, M.D.; PARASHKEVOV, P.P.

Amount of general and active CaCO_3 in main soil types of northern Bulgaria and its significance in viticulture. Dokl.Akad.sel'khoz. 24 no.12:25-28 '59. (MIRA 13:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
Predstavlena akademikom I.N.Antipovym-Karatayevym.
(Bulgaria--Soils) (Calcium Carbonate)

PENKOV, M.D.

Effect of soils and climate on the development of viticulture in
northern Bulgaria. Pochvovedenia no.3:67-72 Mr '59. (MIRA 12:11)

1. Moskovskiy gosuniversitet.
(Bulgaria--Viticulture) (Bulgaria--Soils)

PENKOV, M. D. Cand Geograph Sci -- (diss) "The Chernozem soils of norther Bulgaria, their provincial peculiarities and a system of using them in viniculture," Moscow, 1960, 23 pp, 200 cop. (Moscow State U im Lomonosov, Geographical Faculty) (KL, 44-60, 129)

PENKOV, M.D. (Bolgariya)

Climatic and soil conditions and cultivation practices for
growing Bolgar grapes in northern Bulgaria. Agrobiologia
no.1:109-113 Ja-F '60. (MIRA 13:5)
(Bulgaria--Grapes--Varieties)

PENKOV, M.D.

Transition of southern Chernozems into dark Chestnut soils in
the central part of the Crimean steppe region. Pochvovdenie
no.5:86-92 My '60. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet.
(Crimea—Soils)

PENKOV, Marin Dobrev; ROSSOSHANSKAYA, V.A., red.; DEYEVA, V.M.,
tekhn. red.

[Bolgar grape] Vinograd Bolgar. Moskva, Sel'khozizdat,
1962. 26 p. (MIRA 15:7)
(Grape---Varieties)

PENKOV, M.D.

Arrangement of the root system of the grapevine in soils of
southern Bulgaria. Vest. Mosk. un. Ser. 6: Biol., pochv.
20 no.1:78-86 Ja-F '65. (MIRA 18:3)

1. Kafedra pochvoznaniya Vysshego sel'skokhozyaystvennogo
instituta "G. Dimitrov" v Sofii.

PEN'KOV, M.S., assistant

Diagnosis of paratuberculous enteritis in cattle. Veterinariia
37 no.1:26-27 Ja '60. (MIRA 16:6)

1. Ul'yanovskiy sel'skokhozyaystvennyy institut.
(Cattle--Diseases and pests)

PENKOV, M. S.

"About diagnostics of paratuberculosis enteritis in cattle."

Veterinariya, Vol. 37, No. 1, 1960, p. 26

Assistant, Ulyanov Agric. Inst.

PENKOV, N.

PENKOV, N. Computation in mercerization. p. 35. Vol. 5, no. 11, 1956
ELEKTROENERGIJA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

S/094/61/000/001/003/007
E073/E335

AUTHORS: Pen'kov, N.I., Gramshpul', E.A., Gorelik, V.I.,
Kislov, B.A. and Zotin, P.Ye.

TITLE: Electrolyser for a Ternary Alloy

PERIODICAL: Promyshlennaya energetika, 1961, No. 1, p. 15

TEXT: In one of the plants producing a ternary alloy, carbon electrodes of 400 x 400 x 550 mm were used. For a loading of 12 000 A the current density at the cathode surface was 0.282 A/cm² and at the anode surface it was 1.25 A/cm². During the gradual burning-off of the carbon anodes fragments of the carbon and the ash dropped off, which formed a sludge and screened a part of the liquid surface of the lead cathode, leading to a sharp decrease in yield. Furthermore, the arrangement of the anodes in the electrolyser was such that the current density at the cathode surface was highly non-uniform, which led to local overheating and a reduction in output. To eliminate these drawbacks, the authors proposed

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S/094/61/000/001/003/007
E073/E35

Electrolyser for a Ternary Alloy

substitution of the carbon electrodes by graphite blocks of 300 x 400 x 800 mm. Fragments did not fall off the graphite and thus sludge formation was prevented. In spite of the fact that the current density remained the same, 12 000 A, as for carbon anodes, the current intensity in the case of graphite anodes is distributed more uniformly and consequently the cathode surface of the electrolyser is utilised more efficiently (see sketches). Practical introduction of the proposal of the authors (for which third prize was awarded in the Fifteenth All-Union Competition on Saving Energy) led to the following results.

- 1) The output of the electrolyser increased from 1200-1300 to 1500-1600 kg/day.
- 2) The current efficiency increased from 52-55 to 58-62%.
- 3) The specific electricity consumption decreased from 1650 to 1600 kWh/ton.

The resulting annual saving in electricity for the work
Card 2/4

S/094/61/000/001/003/007
E073/E335

Electrolyser for a Ternary Alloy

under consideration was 1 035 000 kWh.
Note: this is a complete translation.

✓

Card 3/4

41328

S/057/62/032/009/012/014
B117/B186

24.22.00

AUTHORS: Veksler, A. Z., and Pen'kov, N. V.

TITLE: Theory of the surface effect in ferromagnetics located in a non-sinusoidal field

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 9, 1962, 1104 - 1114

TEXT: A theory of the surface effect is developed for infinitely long ferromagnetic plates and rods by investigating their magnetization with a longitudinal, periodical non-sinusoidal field. A stabilized process is analyzed by assuming constant magnetic permeability. Two classical methods are proposed for a quantitative evaluation of the surface effect when the magnetic field strength is a non-sinusoidal time function. The basic equation, which describes the surface effect in a homogeneous isotropic medium on the assumption that the density of displacement currents is lower than that of the conduction currents, reads

$$\Delta H(xyzt) = \sigma \mu \frac{\partial H(xyzt)}{\partial t} \quad (1)$$

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S/057/62/032/009/012/014
B117/B186

Theory of the surface effect...

σ is the electrical conductivity, μ the magnetic permeability, and z the longitudinal coordinate. If the external magnetic field is written as a ~~function of z~~ , bilateral Laplace:

$$H(r,t) = \frac{1}{2\pi i} \left[\int_{\sigma-i\infty}^{\sigma+i\infty} H_+(pr) e^{pt} dp + \int_{\sigma-i\infty}^{\sigma+i\infty} H_-(pr) e^{pt} dp \right] \quad (2c),$$

and if the contour of integration is chosen such that it encloses singular points only, the solutions

$$H_u(r,t) = \lim_{p \rightarrow 0} \frac{H_{0r}(p)}{T} + \frac{2}{T} \sum_{k=1}^{\infty} \operatorname{Re} \left[H_{0r}(ik\omega) \frac{J_0(r\sqrt{-ik\omega\mu})}{J_0(R\sqrt{-ik\omega\mu})} e^{ik\omega t} \right] \quad (18a)$$

$$H_z(x,t) = \lim_{p \rightarrow 0} \frac{H_{0r}(p)}{T} + \frac{2}{T} \sum_{k=1}^{\infty} \operatorname{Re} \left[H_{0r}(ik\omega) \frac{\operatorname{ch} \sqrt{ik\omega\mu} x}{\operatorname{ch} \sqrt{ik\omega\mu} a} e^{ik\omega t} \right], \quad (18b)$$

are also obtained as Fourier series. The subscript y refers to the cylinder, n to the plate. The flux of magnetic induction can be obtained easily from

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Theory of the surface effect...

8/057/62/032/009/012/014
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$$\Phi_{\alpha}(t) = 2\pi\mu \int_0^{\pi} H_{\alpha}(rt) r dr, \quad (19a)$$

$$\Phi_{\alpha}(t) = 4b\mu \int_0^{\pi} H_{\alpha}(xt) dx. \quad (19b)$$

Formulas are also given for the eddy currents losses. The second method is an operational method generalized for considering differential equations. Via Laplace transformation periodic solutions of the linear partial differential equations with constant coefficients are obtained. An analytic representation of the function required is obtained as periodically recurrent sections of curves. The methods proposed here can be used to determine the magnetic field strength in ferromagnetics as well as the induction and eddy current losses. The result of the second method can also be applied to individual pulses. In each concrete case, the choice of method depends on the rate of convergence of the respective series. From this aspect the second method is more suitable. There are 4 figures.

Card 3/4

VEKSLER, A.Z.; PEN'KOV, N.V.

Apparatus for determining the magnetization curve for electrical steel in weak fields. Trudy inst.Kom.stand., mer i izm.prib. no.72: 59-72 '63. (MIRA 16:9)

1. Sverdlovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii imeni Mendeleyeva.
(Steel—Magnetic properties)

VEKSLER, A.Z.; PEN'KOV, N.V.; PALALEYEVA, T.N.

Phase-sensitive audio frequency voltmeter. Trudy inst. Kom. stand.,
mer. i izm. prib. no. 74:67-75 '63.

(MIRA 18:10)

1. Sverdlovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta metrologii im. D.I. Mendeleyeva.

PEN'KOV, N.V.

Effect of the magnetic lag on the determination of the magnetization curve by the ballistic method. Nov.nauch.-issl.rab.po.metr. VINITI no.5:28-29 '64.

Effect of the magnetic lag on the determination of the magnetic characteristics of materials. Ibid.:29-30

(MLRA 18:3)

BR

ACCESSION NR: AP4028957

S/0057/64/034/004/0682/0693

AUTHOR: Pen'kov, N.V.

TITLE: On the theory of the surface effect for ferromagnetic materials in non-sinusoidal fields

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.4, 1964, 682-693

TOPIC TAGS: magnetization, periodic magnetizing field, pulsed magnetizing field, magnetization surface effect

ABSTRACT: Approximate solutions are obtained of the equation $\partial \vec{B} = \text{divgrad } H$ describing the surface effect in the magnetization of a ferromagnetic body. Here H is the magnetic field, B is the induction, σ is the electrical conductivity, and the dot indicates time differentiation. Ferromagnetic bodies of two shapes are discussed: an infinitely long circular cylinder, and an infinitely long thin strip of rectangular cross section. In both cases the periodic applied magnetizing field is longitudinal. Two types of boundary condition are treated: either the field within the ferromagnetic body, or a linear combination of that field and its normal derivative, is equated at the surface of the body to the applied magnetizing field. The bound-

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ACCESSION NR: AP4028957

any condition involving the normal derivative arises when the ferromagnetic solid is assumed to be the core of a tightly wound solenoid in which a current can be induced. The differential equation to be solved is non-linear because of the non-linear relation between B and H . The equation is reduced to a linear equation with time dependent coefficients by treating the permeability as a known function of time. The permeability is actually a function of the magnetic field (hysteresis is neglected), and thus depends on both time and position. Regarding the permeability as a (known) function of time only is the principal approximation introduced. The author suggests that, depending on the conditions of the problem, one may either replace the permeability by its value for the applied external field, when it becomes directly a known function of time, or one may replace it by its average value within the ferromagnetic body. Since the field within the body is not known until the problem is solved, it would seem that in the latter case the solution would have to be obtained by successive approximations; this point is not discussed. Either the permeability B/H itself, or the differential permeability dB/dH may be replaced by a function of time. These two procedures lead to slightly different formulas, which are discussed in some detail. The periodic solution of the linearized equation is obtained by a method of G.A. Grinberg (Izbrannyye voprosy matematicheskoy teorii elektricheskikh i magnitnykh yavleniy / Selected problems in the mathematical theory

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ACCESSION NR: AP4028957

of electric and magnetic phenomena⁷ Izd.AN SSSR, 1948). This gives the solution in the form of an infinite series in which the coefficients are expressed as quadratures. The convergence of this series is briefly discussed. Formulas are derived for the total flux and for the eddy-current loss. Calculations are performed for several specific cases by way of illustration. In all these exemplary calculations the permeability is assumed to be constant. The aperiodic response of the material to a magnetizing pulse can be obtained from the periodic response to a regular succession of pulses by extrapolating to the limit as the time between the successive pulses is indefinitely increased. Orig.art.has: 67 formulas.

ASSOCIATION: none

SUBMITTED: 01Oct62

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: PH

NR REF SOV: 005

OTHER: 001

Card 3/3

L 10754-55 EMT(a) IJP(c)/ESD(dp)/ASD(s)-5/AFWL/ESD(t)/AFETR

ACCESSION NR: AP4046330

S/0057/64/034/010/1732/1741

AUTHOR: Pen'kov, N.V.

TITLE: On the solution of certain non-linear differential equations of mathematical physics

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.10, 1964, 1732-1741

TOPIC TAGS: applied mathematics, nonlinear differential equation, partial differential equation, boundary value problem, integral equation

ABSTRACT: The application of the methods of G.A.Grinberg (Izv.AN SSSR,Ser.fiz.10, 141,1946; Izbrannyy voprosy matematicheskoy teorii elektricheskikh i magnitnykh yavleniy,Izd.AN SSSR,1948; Sbornik,posvyashchenny semidesyatiletiyu akademika A.P. Ioffe,Izd.AN SSSR,1950) to the solution of a class of nonlinear differential equations is discussed. The differential equations in question are of the form

$$M(s_1, \dots, s_{m-1}, s_{m+1}, \dots, s_m) u + A(s) \frac{\partial u}{\partial s_1} + B(s) \frac{\partial u}{\partial s_2} + C(s) u = f(s_1, \dots, s_m, u, \frac{\partial u}{\partial s_1}, \dots, \frac{\partial u}{\partial s_m}),$$

with the boundary conditions

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 ACCESSION NO: AP4046330

$$\left. \begin{aligned} \left[a_s \frac{\partial u}{\partial s_1} - \beta_s u \right]_{s_1=a} &= \varphi_a(s_1, s_2, \dots, s_{i-1}, s_{i+1}, \dots, s_n) \equiv \varphi_a, \\ \left[a_s \frac{\partial u}{\partial s_1} + \beta_s u \right]_{s_1=b} &= \varphi_b(s_1, s_2, \dots, s_{i-1}, s_{i+1}, \dots, s_n) \equiv \varphi_b \end{aligned} \right\}$$

at the ends a, b of the range of the variable s_1 . Here u is the unknown function of the n independent variables s_1, s_2, \dots, s_n ; M is a linear differential operator not involving s_1 ; and $A, B, C, \varphi_a, \varphi_b$ are given functions of the indicated arguments satisfying certain conditions of continuity and differentiability. The quantities A, B, C and i , as functions of s_1 , may have a finite number of discontinuities in the interval (a, b) . This equation is solved by expanding u in a series of eigenfunctions of a certain associated Sturm-Liouville equation. There results a nonlinear integro-differential equation for the expansion coefficients, which is solved by iteration. In case $Mu = 0$, the integrodifferential equation reduces to an integral equation and the iteration is simple. As an example, the equation

$$\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = f(\lambda u - \psi) - f(-\psi),$$

with the boundary conditions

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ACCESSION NR: AP4046330

$$\left. \begin{aligned} u|_{x=1} &= \varphi_0(y), \\ u|_{y=1} &= \varphi_1(x), \end{aligned} \right\}$$

is discussed. Here λ and ϕ are given quantities, and f, φ_a, φ_b are given functions. This equation arises in the theory of the surface effect in alternating magnetization of ferromagnetic plates. Orig.art.has: 81 formulas.

ASSOCIATION: none

SUBMITTED: 08Jan64

ENCL: 00

SUB CODE: MA

REF SOV: 006

OTHER: 000

PEN'KOV, N.V. (Sverdlovsk)

Method for calculating the pulse parameters of ferromagnetic
substances with rectangular hysteresis loops. Avtom. i telem.
26 no.9:1573-1577 3 '65. (MIRA 18:10)

PEN'KOV, O.G.

"The Northern cinnamonic Soils of the Karabakh Steppe and Some of their Genetic Features";

dissertation for the degree of Candidate of Agricultural Sciences
(awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,
1963, pp 232-236)

PEN'KOV, O.G.

Chemical composition of the natural waters of geochemical land forms
in the Karabakh Steppe. Dokl. AN Azerb. SSR 19 no.11:49-52 '63.
(MIRA 17:3)

1. Institut pochvovedeniya i agrokhimii AN AzSSR. Predstavleno
akademikom AN AzSSR V.R. Volobuyevym.

PEN'KOV, O.G.

Mineralogical composition of Brown soils of the Karabakh Ridge.
Dokl. AN Azerb. SSR 20 no.2:47-51 '64. (MIRA 17:6)

1. Institut pochvovedeniya i agrokhimii AN AzerSSR. Predstavleno
akademikom AN AzerSSR V.R.Volubuyevym.

PEN'KOV, O.G. (Baku)

Some characteristics of the chemical composition of plants in
the Karabakh Steppe. Bct. zhur. 49 no.8:1209-1211 Ag '64.
(MIRA 17:11)

KOVALENKO, A.D.; KORNOUKHOV, M.V. [deceased], akademik; PEN'KOV, O.M.;
PISARENKO, G.S. [Pysarenko, H.S.]; SAVIN, G.M. [Savin, H.M.],
akademik; SERENSEN, S.V., akademik; FILIPPOV, A.P.

Development of the problem "Scientific fundamentals of force and
plasticity" by the institutes of the Academy of Sciences of the
Ukrainian S.S.R. Prykl. mekh. 4 no. 3:356-358 '58. (MIRA 13:8)

1. Institut stroitel'noy mekhaniki AN USSR, chlen-korrespondent
AN USSR (for Kovalenko). 2. Laboratoriya gidravlicheskiy mashin
AN USSR, chlen-korrespondent AN USSR (for Filippov). 3. AN USSR
i Institut stroitel'noy mekhaniki AN USSR (for Kornoukhov).
4. Institut metallokeramiki i spetssplyavov AN USSR, chlen-
korrespondent AN USSR (for Pisarenko). 5. AN USSR i Institut mashino-
vedeniya AN USSR (for Serensen). 6. Institut gornogo dela AN
USSR, chlen-korrespondent AN USSR (for Pen'kov). 7. AN USSR i
Institut matematiki AN USSR (for Savin).
(Plasticity)

PEN'KOV, O.M.; BORODAVKO, V.O.

Experimental investigation of the strength of the basic parts of
an IEPM-1-2M rock loading machine. Sbir. prats' Inst. hir. spravy
AN URSR no.6:103-111 '60. (MIRA 13:9)
(Mining machinery--Electric driving)

PEN'KOV, A.M. [Pen'kov, O.M.]

Outlook for the development of research on the "Scientific principles of strength and plasticity" in the Ukrainian S.S.R. in 1960. Prykl.mekh. 6 no.2:125-128 '60.
(MIRA 13:8)

1. Zamestitel' predsedatelya Komissii po problemam prochnosti i plastinosti pri Otdela tekhnicheskikh nauk AN USSR.
(Engineering research)

PEN'KOV, A.M. [Pen'kov, O.M.]

Development of the problem "Scientific principles of
strength and plasticity" by institutes of the Academy
of Sciences of the Ukrainian S.S.R. in 1959. Prykl.
mekh. 6 no.3:352-355 '60. (MIRA 13:8)
(Plasticity)
(Strength of materials)

S/198/61/007/003/012/013
D264/D303

AUTHOR: Pen'kov, O.M.

TITLE: Studies of the problem "Scientific Principles of Strength and Plasticity" in the Institutes of the AS UkrSSR in 1960

PERIODICAL: Prykladna mekhanika, v. 7, no. 3, 1961, 340 - 345

TEXT: Following the plan laid down by the Coordinating Conference, the problem "Scientific Principles of Strength and Plasticity" was tackled in three main divisions: 1) Static and quasi-static strength and plasticity; 2) Strength under vibrations and variable loads; 3) Strength under impulsive loads. Among the most important results were the following: 1) The Institute of Mechanical Engineering and Automation of the AS UkrSSR established a mathematical treatment for the problems of cracks in rigid bodies; 2) The Institute of Metallo-Ceramics and Special Alloys of the AS UkrSSR carried out an investigation into the relation between strength and plasticity in molybdenum and wolfram under tension in an argon at-

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S/198/61/007/003/012/013
D264/D303

Studies of the problem ...

mosphere at temperatures of 20-2200°C; 3) New mathematical methods for dealing with problems of strength and plasticity were proposed by the Institute of Mechanics of the AS UkrSSR, the Institute of Hydrology and Hydraulics of the AS UkrSSR, and the Laboratory of Hydraulic Engineering of the AS UkrSSR; 4) A basic system of differential equations was established for the problem of stress distribution around arbitrary holes in thin shells. Experimental work was done on shells of various forms and materials under torsion and bending to investigate the elastic-plastic state. Electronic computers were largely used for evaluating results; 5) Various investigations were carried out into the oscillations of elastic systems and their critical state; 6) Investigations were carried out into the strength and fatigue of materials and constructions under variable loads. Among the subjects of test were the frame of the new T-75 tractor and also of the D-54 tractor. The effect of temperature on the fatigue limit of steel was investigated, steel IX13 being used. The Institute of Mechanics of the AS UkrSSR investigated the flow of EY 437B and other materials under 10^8 cycles and temperatures of

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Studies of the problem ...

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D264/D303

20 and 700°C; 7) Experimental work to investigate strength under impulsive loads was carried out on certain specific problems (e.g. a cylindrical shell with axisymmetric load). The Institute of Mechanics of the AS UkrSSR proposed a new method of solving such problems. During the year, the institutes published seven monographs on various problems of strength. Three Coordinating Conferences were held by the Institute of Mechanics during 1960: 1) "On the Strength of Thin-Walled Constructions" (together with the State University of Dnipropetrovs'k); 2) "On Heat Stresses in Rods, Laminæ and Shells as Appertaining to Turbo-Building" (together with the Permanent Commission on Turbine Construction of the DNTK of the Council of Ministers and the AS UkrSSR, and the Commission on the Strength of Gas Turbines of the AS UkrSSR); 3) "On Spatial Problems of Elasticity and Plasticity". The Institute of Foundry Production of the AS UkrSSR held a Coordinating Conference on "Fatigue in Metals and Constructions". The Laboratory of Hydraulic Engineering of the AS UkrSSR called an All-Union Coordinating Conference on questions of critical velocity and vibration stability of rotors. The Institute of Metallo-Ceramics and Special Alloys of the AS Ukr-

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Studies of the problem ...

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D264/D303

SSR (together with the DNTK of the Council of Ministers of the Ukr-SSR) held two Coordinating Conferences of an All-Union Nature: 1) On High Temperature Strength in Energy Machines and 2) On Questions of Vibration and Damping in Energy Machines. The Institutes of the VTN AS UkrSSR also took an active part in the conventions, conferences and scientific meetings of the USSR and abroad, including The First All-Union Convention on Theoretical and Applied Mechanics (Moscow, January-February), The All-Union Convention on Plates and Shells (Kazan', - October), a conference on oscillations (Riga, June), a Polish conference on fatigue in metals (Warsaw, May), a Czechoslovak colloquium on problems of fatigue (Prague, September).

Card 4/4

PEN'KOV, A.M., prof.; KAN, S.N., doktor tekhn.nauk, prof., inzhener-polkovnik;
LIVSHITS, Ya.D., doktor tekhn.nauk, prof.

"Structural mechanics for airplanes" by A.A.Umanskii. Reviewed
by A.M.Pen'kov, S.N.Kan, I.A.D.Livshits. Izv.vys.ucheb.zav.;
av.tekh. 5 no.3:187-189 '62. (MIRA 15:9)

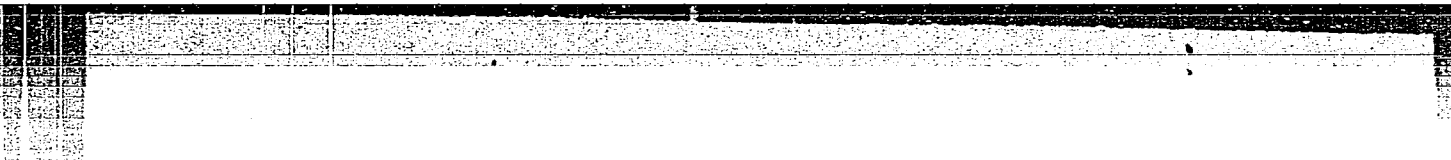
1. Chlen-korrespondent AN UkrSSR (for Pen'kov).
(Airplanes—Design and construction)
(Umanskii, A.A.)

to that of the base metal, and its impurity content did not exceed

Card 1/2

"APPROVED FOR RELEASE: 06/15/2000

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APPROVED FOR RELEASE: 06/15/2000

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L 22841-66 EWP(e)/EWT(m)/EWP(v)/EWP(j)/T/EWT(t)/EWP(k) LWP(c) JD/ET/HA/RM/WH/JH
ACC NR: AP6011271 SOURCE CODE: UR/0413/66/000/006/0125/0125

INVENTOR: Bagryanskiy, K. V.; Kassov, D. S.; Korneyev, A. D. Penkov,
O. M.

ORG: none

TITLE: Ceramic flux for welding aluminum. Class 49, No. 180074

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 125

TOPIC TAGS: welding, aluminum welding, submerged arc welding, welding flux, ceramic flux

ABSTRACT: This Author Certificate introduces a ceramic flux for submerged arc welding of aluminum which contains potassium chloride, cryolite, sodium chloride, and carboxymethyl cellulose as binder. To improve the quality of weld metal, the flux composition is set as follows (in weight parts): potassium chloride 47—48, cryolite 28—30, sodium chloride 19—20, silica 3—5, and carboxymethyl cellulose 12—13. [ND]

[ND]

SUB CODE: 11/13 SUBM DATE: 09May63/ ATD PRESS: 4229

Card 1/1 BK

PENKOV, P.

Devices using highly plastic materials. Tr. from the Russian. p. 115.
STROJIRENSAK VYROVA, Prague, Vol. 2, no. 3, Mar. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

PENKOV, P.

"Substitute for linseed oil."

p.42 (Transportno Delo, Vol. 10, no, 3, 1958, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

PENKOV, P.; ATANASOV, At.

Assembly-line method and possibilities of its extending in the factory
"Elprom" of Varna. Tekh delo no.440:2 25 Ag '62.

PEN'KOV, P. M., Engineer

ENIMS (1943)

"Computing Tractive Force of Feed Mechanism", Stankil Instrument, 14, No. 11-12, 1943.

BR-52059019.

PEN'KOV, P. M., Engineer

Enims (-1946-)

"A Multi-Position Clamping Attachment" Stanki I Instrument, 17, No. 6, 1946

BR-502059019

1. PEN'KOV, P. M.
2. USSR (600)
3. Machine-Tool Industry
4. New boring mills, thread-cutting machines, vertical milling machines and slotting machines.
Stan. i instr. No. 10 - 1952.
9. Monthly List of Russian Acquisitions, Library of Congress, February, 1953. Unclassified.

1. PEN'KOV, P. M.
2. USSR (600)
4. Machine Tools
7. New boring mills, thread-cutting machines, vertical milling machines and slotting machines, Stan. 1 instr., 23, No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

PEN'KOV, P.M.

Gripping devices with the utilization of hydraulic-plastic materials. Stan.
i instr. 24 no.7:25-27 J1 '53.

(MIRA 6:8)

(Chucks)

PEN'KOV, P.M.

Economical use of metals in machine-tool construction. Stan. i instr. vol. 24
no.9:1-6 S '53.

(MLBA 6:10)

(Machine-tool industry)

PIB'KOV, P.M., inzhener.

Dimensional series for machine tools. Standartizatsia no.4:
12-17 JI-Ag '56. (MLBA 9:11)
(Machine tool)

PEN'KOV, P. M.

"Type Classification and the Basic Problems of Unification
of Metal-Cutting Machine Tools During the Sixth Five-Year
Plan."

Standartizatsiya, No. 2, 1956, pp 19-28

Translation M-3,053,010, 19 Dec 56

PEN'KOV, P.M.

PHASE I BOOK EXPLOITATION

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USSR. Komitet standartov, mer i izmeritel'nykh priborov

Materialy 2-go i 3-go soveshchaniy po standartizatsii i normalizatsii v mashinostroyeni (Materials of the Second [Dec. 1956] and Third [May 1957] Conferences on Standardization and Normalization in Machine Building) Moscow, Standartgiz, 1958. 135 p. 2,000 copies printed.

Resp. Ed.: Krynkina, K.M.; Ed. of Publishing House: Rozova, L.V.; Tech. Ed.: Matveyeva, A.Ye.

PURPOSE: This collection of articles is intended for designers and engineering specialists.

COVERAGE: The book contains abbreviated versions of lectures given during the 2nd and 3rd Scientific Methodology Conferences held in December 1956 and May 1957 respectively. The first part of the book reviews the significance of introducing into Soviet engineering practices a system of preferred numbers based on recommendation of the International Standards Organization (ISO). The second part of the book generalizes on the experimental studies of standardization and unification conducted by various machinery-manufacturing branches

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of Soviet industry. No personalities are mentioned. There are no references.

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